

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A component transportation and installation device which transports and installs an installed component in an installation position of a receiving body, comprising:

a grip mechanism which grips the installed component, the grip mechanism comprising a dead man switch;

component transportation means ~~[[of]]~~ for moving the grip mechanism with an actuator;

first actuator control means ~~[[of]]~~ for controlling the actuator of the component transportation means according to a predetermined route and performing drive control ~~so as to~~ transport and install the installed component in the installation position; and

second actuator control means ~~[[of]]~~ for performing assist control of the actuator of the component transportation means, and performing drive control ~~so as to reduce a burden of a worker performing operation~~ in order to transport and install the installed component in the installation position; and

~~mode switch means for switching between the first actuator control means and the second actuator control means, wherein~~ the dead man switch is configured to enable the first actuator control means when the dead man switch is not actuated and switches to enable the second actuator control means every time the mode switch means when the dead man switch is actuated and wherein the second actuator control means automatically reverts back to the first actuator control means the instant the mode switch means is no longer being actuated.

2. (Currently Amended) A component transportation and installation method of transporting and installing an installed component in an installation position of a receiving body using component transportation means having at least an actuator for transportation, comprising the steps of:

performing transportation and installation by selecting an actuator automatic control step of automatically transporting and installing the installed component in the installation position with controlling the actuator according to a predetermined route, ~~or~~ and an actuator assist control step of reducing a burden of a worker[[,]] who performs transportation and installation operation of the installed component[[,]] by ~~performs~~ assist control of the actuator, ~~wherein the worker switches; and~~

switching between the actuator automatic control step and the actuator assist control step at any time according to a work condition by actuating a dead man switch configured to enable assist control when the dead man switch is actuated and to enable automatic control when the dead man switch is not actuated, and wherein the dead man switch is configured to be actuated at every point during the transportation and installation.

3. (Currently Amended) A component transportation and installation method including a step of installing an installed component, transported near an installation position, in a receiving body, comprising the steps of:

positioning the installed component in an installing section of the receiving body by operating the installed component transported near the installation position in an

assist mode which can reduce a worker's burden, by actuating a mode-control dead man switch;

installing the positioned installed component in the receiving body automatically;
and

moving a grip mechanism comprising the dead man switch, which grips the installed component after completion of installation[[,]] to a predetermined position in an automatic mode, ~~the automatic mode occurring the instant the mode control switch is no longer being actuated~~ wherein the dead man switch is configured to enable the automatic mode when the dead man switch is not actuated and to enable the assist mode when the dead man switch is actuated.

4. (Currently Amended) A component transportation and installation device for installing an installed component in a receiving body, comprising:

a grip mechanism which can grip the installed component, the grip mechanism comprising a dead man switch;

component transportation means equipped with an actuator for transporting the grip mechanism; [[and]]

an installation mechanism which can perform installation work when the installed component is positioned in an installing section of the receiving body, and wherein the operation of the actuator of the component transportation means includes switching between an automatic mode ~~which does not need a worker~~, and an assist mode which ~~can reduce a worker's burden although a worker's intervention is needed~~; and

a control means performing control to select the assist mode when positioning at least the installed component, wherein the control means is configured to enable selects the assist mode by actuating ~~a mode-control~~ the dead man switch and wherein the assist mode reverts to enable the automatic mode ~~the instant~~ by no longer the control means steps actuating the mode-control dead man switch.

5. (Currently Amended) A component transportation and installation method of repeatedly transporting at least two installed components in a component supply position toward an installation position including gripping the at least two installed components by a grip mechanism comprising a dead man switch while conveying a receiving body, which is given pitch feed, to the installation position sequentially, returning the grip mechanism to the component supply position at a time of completion of installing the at least two installed components in the receiving body, comprising the steps of:

making the grip mechanism free to perform switching between an automatic mode ~~which does not need a worker~~, and an assist mode ~~which can reduce a worker's burden although a worker's intervention is needed~~, by actuating ~~a mode-control~~ the dead man switch, as means of transporting the at least two installed components, and simultaneously performing switching to an automatic transportation mode after gripping the at least two installed components by the grip mechanism and automatically transporting the at least two installed components at least nearby the installation position; and

making the grip mechanism return to the component supply position in the automatic mode when an installation of the at least two installed components is completed by releasing actuation of the dead man switch, wherein the dead man switch is configured to enable the automatic mode ~~occurs every time~~ when the mode-control ~~dead man~~ switch is not being actuated and to enable wherein the assist mode ~~occurs every time~~ when the mode-control ~~dead man~~ switch is being actuated; and

simultaneously transporting and installing the at least two installed components in the installation position in a stop period of one pitch feed of the receiving body.

6. (Currently Amended) A component transportation device for transporting and installing at least two installed components in a receiving body which is given pitch feed, comprising:

receiving body transportation means for performing pitch feed of the receiving body;

a grip mechanism which grips the at least two installed components in a component supply position, the grip mechanism comprising a dead man switch; and

component transportation means configured to transport ~~of transporting~~ the grip mechanism at least to an installation position in an automatic transportation mode which ~~does not need a worker~~, or an assist transportation mode which ~~does not need a worker, or an assist transportation mode which can reduce a worker's burden although a worker's intervention is needed~~, and to return returning the grip mechanism in the automatic transportation mode or assist transportation mode to the component supply position when installation is completed, ~~and in that~~

~~wherein the component transportation means is configured to control~~ the grip mechanism ~~is controlled so as~~ to transport the at least two installed components in an installation position in a stop period of one pitch feed of the receiving body, and

wherein the dead man switch is configured to enable the automatic transportation mode ~~occurs every time a mode control~~ when the dead man switch is not being actuated and wherein to enable the assist mode ~~occurs every time the mode control~~ when the dead man switch is being actuated.